

National Weather Service Forecast Office Dodge City, Kansas

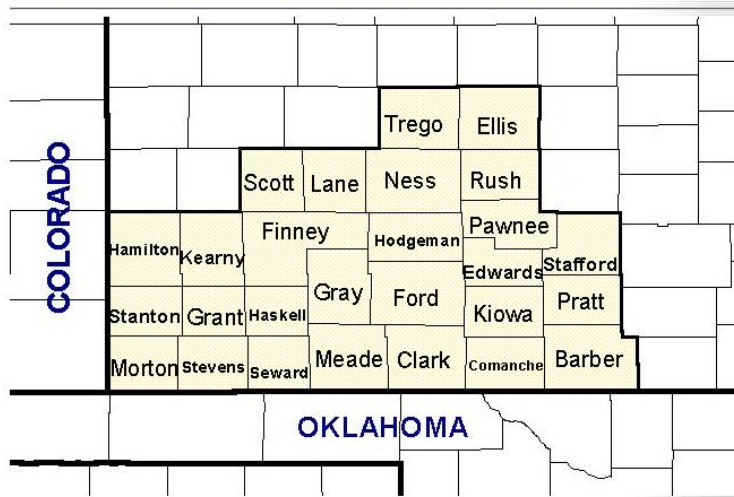
General Information

LOCATION

The National Weather Service Forecast Office (WFO) in Dodge City, Kansas is physically located on property owned by the City of Dodge City a short distance west of the Dodge City Regional Airport terminal building. The office is approximately 2.5 miles east-northeast of downtown Dodge City.



OFFICE PROGRAMS



WFO Dodge City is a full service National Weather Service office, providing forecasts and warnings to 27 counties covering 22,442 square miles in Kansas. Population density is low, and the largest cities in the area serviced by WFO Dodge City have populations less than 30,000. Total population in the Dodge City area of forecast responsibility is about 222,049 (2000 census).

The staff at WFO Dodge City comprises ten forecasters, an Observing Program Leader, two Hydrometeorological Technicians, one Intern, an Electronics Systems Analyst and two electronics technicians, a Service Hydrologist, an Information Technology Officer, a Science and Operations Officer, a Warning Coordination Meteorologist, an Administrative Services Assistant and a Meteorologist in Charge. Significant flooding is rare in western Kansas, and most hydrologic problems are the result of ponding and rapid runoff from localized excessive rainfall. The Service Hydrologist stationed at WFO Dodge City also serves the Goodland, Kansas WFO. WFO Dodge City forecasters provide Terminal Aviation Forecasts for three airports: Dodge City, Garden City and Hays.



Severe weather is common in the Dodge City area, especially during the spring and early summer. Most severe events occur with short lines or clusters of thunderstorms; however, organized bow echo high wind events also have been observed. The most prolific severe weather producers are supercell thunderstorms. Although the average number of tornadoes each year in the area served by WFO Dodge City is 14, recent years have been exceptionally active. A record 81 tornadoes occurred in 2008. The year 2007 also was very active with

57 tornadoes, including the Greensburg EF5 tornado. WFO Dodge City typically issues between 300 and 400 severe thunderstorm warnings each year.

A few winter storms typically affect the Dodge City area each year. Most snow events are accompanied by high winds and considerable blowing and drifting snow. The greatest 24 hour snowfall in recent history was 15.1 inches in March 1999. Arctic air spilling southward in the lee of the Rockies can produce extreme temperature changes of more than 60 degrees in a twelve hour period. Cold periods usually last only a few days before downslope flow in the lee of the Rocky Mountains scours out the frigid air. Ice storms are rare in western Kansas but can be very

severe when they do occur. Temperatures drop below zero degrees Fahrenheit an average of four or five days per year. The coldest temperature observed in Dodge City was -26 on 12 February 1899.

Outreach and education are integral components of the services provided by WFO Dodge City. WFO personnel provide at least one spotter training session for every county served by the Dodge City office each year, and numerous safety presentations are provided to various businesses and organizations throughout the year. Relations with the media and emergency management communities are very positive.

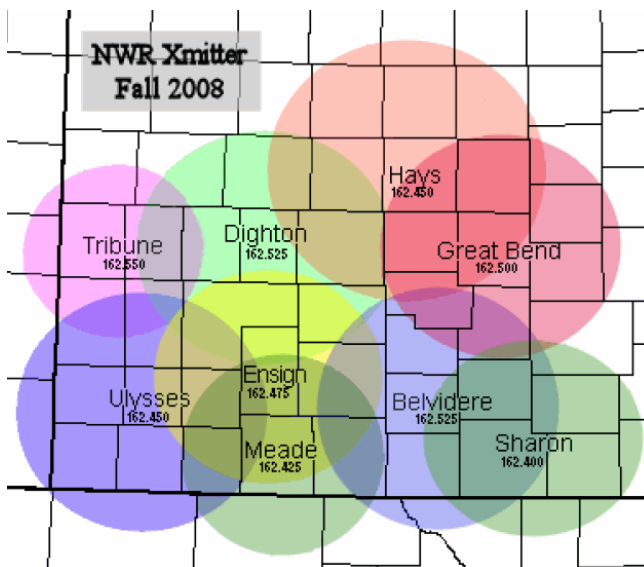
Much of the area serviced by WFO Dodge City is agricultural with extensive areas of grassland suitable for cattle grazing. Wildfires can spread very quickly through cured grasses and can be difficult to control. WFO Dodge City provides early morning Fire Weather Planning Forecasts every day and Fire Weather Watches and Red Flag Warnings as needed. The Spot Forecast load is relatively low and largely confined to federally controlled land in the Quivira National Wildlife Refuge and Cimarron National Grasslands. Typically around 30 Spot Forecasts are provided every year.



WFO Dodge City maintains a network of 68 cooperative observation sites, including eight Fischer Porter gauges. Only three Automated Surface Observation Systems (ASOS) exist in the area served by WFO Dodge City, but a number of Automated Weather Observing Systems (AWOS) and other mesonet sites are available to provide valuable data for mesoanalysis. WFO personnel are not permitted to augment ASOS observations, and only the Garden City Regional Airport has a tower with personnel who can augment ASOS observations. WFO Dodge City personnel provide Supplementary Climatological Data (SCD) and Supplementary Data Observations (SDO) as needed. Dodge City is a rawinsonde site and collects upper air data twice

each day. A profiler at Haviland provides supplementary information on winds aloft. The Dodge City WSR-88D Radar Data Acquisition tower and antenna are collocated with the WFO.

Southwestern Kansas has nearly complete NOAA Weather Radio coverage. WFO Dodge City provides separate programming for seven transmitters located



near Ellis, Ensign, Tribune, Dighton, Ulysses, Meade, and Belvidere.

ENVIRONMENT

WFO Dodge City is located in the High Plains of western Kansas in an area characterized by wide open spaces, clean air, relatively low cost of living and meteorological extremes. A bit of feedlot odor occasionally wafts into Dodge City when the low level flow is from the southeast. Roads are straight, and visibilities are excellent for observing atmospheric phenomena. Commuting time from the WFO to any location in Dodge City is no more than 15 minutes, even during peak traffic periods. Western Kansas experiences almost every kind of meteorological phenomenon with the exception of tropical cyclones, and forecasting weather on the High Plains poses significant challenges even in seemingly benign regimes. The climate of Dodge City can be characterized as semi-arid, and short grass and shrubs comprise the natural vegetation. Trees



generally are confined to areas near creeks and canyons where water is more readily available. Irrigation from the Ogallala Aquifer is widespread in western Kansas and permits production of crops such as corn that require considerably more water than occurs naturally. Based on the 30 year period from 1971 to 2000, the average annual rainfall in Dodge City is 22.35 inches, and the annual average snowfall is 21.6 inches. Actual totals vary widely, as is typical on the High Plains. The average daily maximum temperature is 92.8 degrees in July and 41.4 degrees in January. The average daily minimum temperature is 66.8 degrees in July and 18.7 degrees in

January. Diurnal ranges in excess of 40 degrees are not uncommon. [Detailed climatological information](#) is available on the WFO web site.

HISTORY

The city of Dodge City is located along the Mountain Branch of the Santa Fe Trail, which ran along the north side of the Arkansas River into Colorado. Wagon ruts from the Santa Fe Trail still are evident west of Dodge City. Fort Dodge was established in 1865 along the Santa Fe Trail between two major Indian crossings on the Arkansas River. It was an important post offering protection to wagon trains and provided a source of supplies for troops engaged in war with the Native American population. Vast herds of buffalo roamed the High Plains in the mid 1800s, and wild game was abundant.

Dodge City was established in 1872 five miles west of Fort Dodge along the edge of the military reservation. The railroad reached Dodge City in 1872, and the city became a busy trade center for buffalo hunters and travelers. Approximately 850,000 buffalo hides were shipped from Dodge City between 1872 and 1874. After the buffalo herds were decimated, Dodge City became a major shipping terminal for herds of Texas longhorns driven up the Western Trail from Texas to Dodge City. Between 1875 and 1886, more than 5,000,000 cattle were driven up the Western Trail to Dodge City. The population varied widely by season, and Dodge City developed a reputation for wild and lawless town. In 1876, the population of Dodge City was 1200 and supported nineteen businesses licensed to sell liquor. Famous law men such as Bat Masterson and Wyatt Earp became legends in Dodge City. The long running television series *Gunslinger* was based on life in Dodge City during its wilder days.

Fort Dodge closed in 1882, and the cattle drives ended by 1886. Dodge City became a much quieter community with an economy based largely on agriculture. The largest employers in Dodge City today are Excel Corporation and National Beef with a combined workforce of approximately 5400 employees. Other major employers are the Unified School District with a workforce of 1000, Wal Mart, with 347 employees and Western Plains Medical Complex, with a staff of 285. As of 2006, the city of Dodge City had a population of 26,101. The population of Ford County was 32,458. This total comprises 18,607 Whites, 12,231 Hispanics and 1,620 of other ethnic origin.

SCHOOLS

[The Dodge City Public School System](#) has eight elementary schools, two intermediate centers, one middle school and one high school. Ross elementary was constructed in 2008 and opened in the fall of 2008. The high school building was new in 2002. Parochial education for kindergarten through grade eight is offered at [Sacred Heart Cathedral School](#). Higher education is available at [Dodge City Community College](#), and four year outreach courses are offered locally through [Fort Hays State University](#), [Friends University](#) and [Newman University](#).

COST OF LIVING

The cost of living in Dodge City is relatively low. Based on data from 2008 with 100 representing the national average, the general cost of living index for Dodge City was 91.1, and housing was 83.1. New construction costs for a residence with three bedrooms, two baths, a two car garage and an unfinished basement run between \$110 and \$125 per square foot. [Existing housing](#) varies widely in value, but a good selection of properties typically can be found for between \$125,000 and \$200,000. Limited rental properties are available. The estimated cost for a two bedroom apartment with about 950 square feet of living space is \$500/month. More detailed information on the cost of living in Dodge City is available from the [Dodge City/Ford County Development Corporation](#).

TAXES

Kansas has a state income tax with marginal rates from 3.5% to 6.45%, depending on taxable income. The state of Kansas has a retail sales tax of 5.3%, and Ford County and Dodge City levy an additional 2.65% sales tax for a total sales tax of 7.95% in Dodge City. Property taxes in Dodge City are relatively high; the mill levy in 2008 was 181.063.

ACCOMMODATIONS

Dodge City offers a number of [motels](#) for the convenience of the visitor. A [bed and breakfast](#) in an historic old home near downtown Dodge City provides an opportunity to sample Dodge City in its historic glory. More than 800 rooms are available, and the largest banquet room holds 1000. Finding a motel room usually is not a problem except during the last week of July and the first week of August when the Dodge City Days celebration and PRCA Rodeo are in progress.

TRANSPORTATION

[Great Lakes Airlines](#) offers daily service to Kansas City and Denver from the Dodge City Regional Airport. Amtrak provides rail service to Dodge City. The [Southwest Chief](#) arrives twice daily. Stagecoach Taxi Service is available as needed. Dodge City General Public Transportation provides service within the city limits of Dodge City with 24 hours advance notice and a suggested donation of \$1. Rental cars are available through Enterprise and Hertz.

RESTAURANTS

Numerous eating establishments provide an outstanding variety of choices to satisfy nearly every palate. Portions offered by most restaurants are abundant, and prices are relatively low. Traditional American foods, including excellent steaks from the local beef enterprise, and outstanding Mexican are readily available. Most fast food chains have restaurants in Dodge City for those who prefer a quick dining experience. Other ethnic restaurants also offer unique fare for the gastronomic delight of those desiring something different. A partial list of restaurants is offered by the [Dodge City Area Chamber of Commerce](#).

RECREATION

An eighteen hole public golf course covers 144 acres on the west side of Dodge City, and an eighteen hole country club course is located on the east side of town. A community recreation center offers two gymnasiums, an indoor pool and a fitness room. Nearby lakes include Ford County Lake, five miles north of Dodge City and Clark County Lake, 35 miles southeast of Dodge City. Horse Thief Reservoir, under construction north of Dodge City, will provide a variety of recreational opportunities when completed. Water Sports Campground, a private facility on the south side of Dodge City, provides swimming, fishing, waterskiing and camping opportunities. Dodge City Raceway Park provides dirt track racing from April through October. Legends Park offers tournament facilities for baseball, softball and soccer.

COMMUNITY ATTRACTIONS

The Dodge City Days celebration is the largest local event. Parades, arts and crafts shows, car races, concerts, dances, a barbeque competition, and a community mountain oyster feed provide something for everyone to enjoy. Kansas' largest PRCA rodeo occurs on five nights of the Dodge City Days. Boot Hill Museum and Front Street provides an excellent opportunity to review the history of Dodge City and western Kansas. More than 100,000 visitors pass through the Museum each year. The Boot Hill Repertory Dinner Theater provides live theater periodically at the restored Dodge City Depot. A [calendar of events](#) is available through the Dodge City Convention and Visitors Bureau. A number of [churches](#) serving mainstream denominations are scattered throughout Dodge City.